SEQUENCE LISTING

<110> Ottawa Health Research Institute

<120> Diabetogenic Epitopes

<130> 08899427WO

<140> Unknown
<141> Unknown

<150> US 60/535,278
<151> 2004-01-09

<160> 8

<210> 1
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> epitope

<400> 1

Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln
1 5 10

<210> 2
<211> 2018
<212> DNA
<213> unknown

<220>
<223> wheat gene

<400> 2

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cttcagcggt gcgtgcagcg gtgccagcag gaccggccgc ggtactctca tgcccggtgc 180

gtgcaggagt gccgggacga ccagcagcag cacggaaggc acgagcagga ggagcagggc 240

cgcgggcatg gccggcacgg cgagggggag cgtgaggagg agcagggccg tggccgtggg 300

cggcgcggcc agggagagcg tgaggaggag cagggccgtg gacgtgggcg gcgcggcgag 360

ggagagcgtg atgaggagca cggggatggc cggcggccgt acgtgttcgg cccgcgcagc 420

ttccgccgca tcatccggag cgaccacggg ttcgtcaagg cccttcgccc gttcgacgaa 480

gtgtccaggc tcctccgggg catcaggaac taccgtgtcg ccatcatgga ggtgaacccg 540

cgcgcgttcg tcgtgccggg actcacggac gcagacggcg tcggctacgt cgctcaaggc 600

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gatgtgatcg tggcgccggc ggggtccatc atgcacctgg ccaacaccga cggccggagg 720

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cagcaacgcc gacgcgggtc cggctccgag tcggaggagg agcaggacca gcagaggtac 1380

cagacggtcc gcgcgcgggt gtcgcgcggc tcggcgttcg tggtgccccc cggccacccg 1440

gtggtggaga tcgcctcgtc ccgcggcagc agcaacctcc aggtggtgtg cttcgagatc 1500

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ttcagtaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa 2018

<210> 3
<211> 588
<212> PRT
<213> unknown

<220>
<223> WP5212 sequence

<400> 3

Met Ala Thr Arg Gly Arg Ala Thr Ile Pro Leu Leu Phe Leu Leu Gly
1 5 10 15

Thr Ser Leu Leu Phe Ala Ala Ala Val Ser Ala Ser His Asp Glu Glu
20 25 30

Glu Asp Arg Arg Gly Gly Arg Ser Leu Gln Arg Cys Val Gln Arg Cys
35 40 45

Gln Gln Asp Arg Pro Arg Tyr Ser His Ala Arg Cys Val Gln Glu Cys
50 55 60

Arg Asp Asp Gln Gln Gln His Gly Arg His Glu Gln Glu Glu Gln Gly
65 70 75 80

Arg Gly His Gly Arg His Gly Glu Gly Glu Arg Glu Glu Glu Gln Gly
85 90 95

Arg Gly Arg Gly Arg Arg Gly Gln Gly Glu Arg Glu Glu Glu Gln Gly
100 105 110

Arg Gly Arg Gly Arg Arg Gly Glu Gly Glu Arg Asp Glu Glu His Gly
115 120 125

Asp Gly Arg Arg Pro Tyr Val Phe Gly Pro Arg Ser Phe Arg Arg Ile
130 135 140

Ile Arg Ser Asp His Gly Phe Val Lys Ala Leu Arg Pro Phe Asp Glu
145 150 155 160

Val Ser Arg Leu Leu Arg Gly Ile Arg Asn Tyr Arg Val Ala Ile Met
165 170 175

Glu Val Asn Pro Arg Ala Phe Val Val Pro Gly Leu Thr Asp Ala Asp
180 185 190

Gly Val Gly Tyr Val Ala Gln Gly Glu Gly Val Leu Thr Val Ile Glu
195 200 205

Asn Gly Glu Lys Arg Ser Tyr Thr Val Arg Gln Gly Asp Val Ile Val
210 215 220

Ala Pro Ala Gly Ser Ile Met His Leu Ala Asn Thr Asp Gly Arg Arg
225 230 235 240

```
Lys Leu Val Ile Ala Lys Ile Leu His Thr Ile Ser Val Pro Gly Lys
                245                 250                 255

Phe Gln Tyr Phe Ser Ala Lys Pro Leu Leu Ala Ser Leu Ser Lys Arg
            260                 265                 270

Val Leu Thr Ala Ala Leu Lys Thr Ser Asp Glu Arg Leu Gly Ser Leu
        275                 280                 285

Leu Gly Ser Arg Gln Gly Lys Glu Glu Glu Glu Lys Ser Ile Ser Ile
    290                 295                 300

Val Arg Ala Ser Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Ala Ser
305                 310                 315                 320

Glu Gly Asp Gln Gly His His Trp Pro Leu Pro Pro Phe Arg Gly Asp
                325                 330                 335

Ser Arg Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys Ile Ala Asn
            340                 345                 350

Arg His Gly Arg Leu Tyr Glu Ala Asp Ala Arg Ser Phe His Ala Leu
        355                 360                 365

Ala Gln His Asp Val Arg Val Ala Val Ala Asn Ile Thr Pro Gly Ser
    370                 375                 380

Met Thr Ala Pro Tyr Leu Asn Thr Gln Ser Phe Lys Leu Ala Val Val
385                 390                 395                 400

Leu Glu Gly Glu Gly Glu Val Glu Ile Val Cys Pro His Leu Gly Arg
                405                 410                 415

Asp Ser Glu Arg Arg Glu Gln Glu His Gly Lys Gly Arg Trp Arg Ser
            420                 425                 430

Glu Glu Glu Glu Asp Asp Arg Arg Gln Gln Arg Arg Arg Gly Ser Gly
        435                 440                 445

Ser Glu Ser Glu Glu Glu Gln Asp Gln Gln Arg Tyr Glu Thr Val Arg
    450                 455                 460

Ala Arg Val Ser Arg Gly Ser Ala Phe Val Val Pro Pro Gly His Pro
465                 470                 475                 480

Val Val Glu Ile Ala Ser Ser Arg Gly Ser Ser Asn Leu Gln Val Val
                485                 490                 495

Cys Phe Glu Ile Asn Ala Glu Arg Asn Glu Arg Val Trp Leu Ala Gly
            500                 505                 510

Arg Asn Asn Val Ile Ala Lys Leu Asp Asp Pro Ala Gln Glu Leu Ala
        515                 520                 525

Phe Gly Arg Pro Ala Arg Glu Val Gln Glu Val Phe Arg Ala Lys Asp
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```
   530                 535                 540

Gln Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Gln Glu His
545                 550                 555                 560

Glu Arg Gly Asp Arg Arg Arg Gly Asp Arg Gly Arg Gly Asp Glu Ala
                565                 570                 575

Val Glu Ala Phe Leu Arg Met Ala Thr Ala Ala Leu
            580                 585
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<210> 4
<211> 290
<212> PRT
<213> unknown

<220>
<223> alpha/beta gliadin A-II precursor

<400> 4

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Met Lys Thr Phe Pro Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr
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Ala Thr Thr Ala Val Arg Val Pro Val Pro Gln Leu Gln Leu Gln Asn
            20                  25                  30

Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Glu Gln
        35                  40                  45

Gln Phe Gln Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro
    50                  55                  60

Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro
65                  70                  75                  80

Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro
                85                  90                  95

Gln Gln Pro Tyr Pro Gln Pro Gln Pro Gln Tyr Ser Gln Pro Gln Gln
            100                 105                 110

Pro Ile Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
        115                 120                 125

Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu Ile Pro Cys Arg
    130                 135                 140

Asp Val Val Leu Gln Gln His Asn Ile Ala His Gly Ser Ser Gln Val
145                 150                 155                 160

Leu Gln Glu Ser Thr Tyr Gln Leu Val Gln Gln Leu Cys Cys Gln Gln
                165                 170                 175
```

```
Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala Ile His Asn Val
            180                 185                 190

Val His Ala Ile Ile Leu His Gln Gln His His His His Gln Gln Gln
        195                 200                 205

Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln
    210                 215                 220

Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Phe Phe Gln Pro Ser Gln
225                 230                 235                 240

Gln Asn Pro Gln Ala Gln Gly Ser Phe Gln Pro Gln Gln Leu Pro Gln
                245                 250                 255

Phe Glu Glu Ile Arg Asn Leu Ala Leu Gln Thr Leu Pro Ala Met Cys
            260                 265                 270

Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Phe Gly Ile Phe
        275                 280                 285

Gly Thr
    290
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<210> 5
<211> 307
<212> PRT
<213> unknown

<220>
<223> alpha/beta gliadin MM1 precursor

<400> 5

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Met Lys Thr Phe Leu Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr
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Ala Arg Ile Ala Val Arg Val Pro Val Pro Gln Leu Gln Pro Gln Asn
            20                  25                  30

Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Gln Gln
        35                  40                  45

Gln Phe Pro Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro
    50                  55                  60

Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro
65                  70                  75                  80

Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Leu Pro Tyr Pro
                85                  90                  95

Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro Gln Gln
            100                 105                 110
```

```
Pro Tyr Pro Gln Ser Gln Pro Gln Tyr Ser Gln Pro Gln Gln Pro Ile
        115                 120                 125

Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Lys Gln Gln
    130                 135                 140

Gln Gln Gln Gln Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu
145                 150                 155                 160

Ile Pro Cys Arg Asp Val Val Leu Gln Gln His Ser Ile Ala Tyr Gly
                165                 170                 175

Ser Ser Gln Val Leu Gln Gln Ser Thr Tyr Gln Leu Val Gln Gln Leu
            180                 185                 190

Cys Cys Gln Gln Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala
        195                 200                 205

Ile His Asn Val Val His Ala Ile Ile Leu His Gln Gln Gln Gln Gln
    210                 215                 220

Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln
225                 230                 235                 240

Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Ser Phe Gln Pro Ser Gln
                245                 250                 255

Gln Asn Pro Gln Ala Gln Gly Ser Val Gln Pro Gln Gln Leu Pro Gln
            260                 265                 270

Phe Glu Glu Ile Arg Asn Leu Ala Leu Glu Thr Leu Pro Ala Met Cys
        275                 280                 285

Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Val Gly Ile Phe
    290                 295                 300

Gly Thr Asn
305
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<210> 6
<211> 20
<212> PRT
<213> unknown

<220>
<223> diabetogenic epitope homopolymer

<400> 6

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Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Glu Glu Gln Leu Arg Glu
1               5                   10                  15
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Leu Arg Arg Gln
20

<210> 7
<211> 18
<212> DNA
<213> artificial

<220>
<223> primer

<400> 7

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<210> 8
<211> 18
<212> DNA
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aacacctcct gcacctcc 18